

Work Order ID 72769

Friday, August 12, 2011 2:34:38 PM



Page 1

Item ID: D3874-2

Accept



Setup Start



Revision ID:

Stop



Item Name: Floor Protector

Start Date: 8/12/2011 Start Qty: 4.00



Cust Item ID:

Required Date: 8/19/2011 Req'd Qty: 4.00



Customer:

Reference:

Approvals:

Process Plan:

Date: 8/12/11

Tooling:

Date:

Run Start



QC:

Date:

SPC (Y/N):

Date:

Stop



Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
--------------------------------	--------------------------	----------------------	---------	--------	--------------	---------------	---------------	------------------	----------------

Draw Nbr

Revision Nbr

D3874

A

100

0.00



HandThermo

Memo

0.00

Hand Finishing Thermoforming

1-Cut Sheet to required Blank size

11/08/17

105

0.00



HandThermo

Dry Material

Memo

0.00

Hand Finishing Thermoforming

Dry Sheet as per QSI022 POLYCARBONATE

11/08/17

Temp: 240° F

Time IN: 4:00 pm 11/08/16

Time OUT: 7:00 am 11/08/17

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Work Order ID 72769

Friday, August 12, 2011 2:34:38 PM



Page 2

Item ID: D3874-2

Accept



Setup Start



Revision ID:

Stop



Item Name: Floor Protector

Start Date: 8/12/2011 Start Qty: 4.00



Cust Item ID:

Required Date: 8/19/2011 Req'd Qty: 4.00



Customer:

Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

Run Start



QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Stop



Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
--------------------------------	--------------------------	----------------------	---------	--------	--------------	---------------	---------------	------------------	----------------

110

0.00



Thermoform

Memo

0.00

Thermoforming Machine

1-Machine Set-Up
2-Pre-heat Tool to required temp.
3-Thermoform as per Dwg and Folio #FTA039 using tool DT9474
Dwg Rev: A
Folio Rev: B

x 5 *dh*

dh
11/08/17

120

QC2- Inspect parts off machine FAI/FAIB

0.00



QC

Memo

0.00

Quality Control

Visually inspect part for proper formation and texture

x 5 *dh*

dh
11/08/17

130

QC8- Inspect parts - second check

0.00



QC

Memo

0.00

Quality Control

Sulos/12

(+4)
2

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

[illegible]

Page 3

Accept

1. The first group of respondents (Group 1) consisted of 100 individuals who were randomly selected from the general population of the United States. These individuals were surveyed via telephone.

2. The second group of respondents (Group 2) consisted of 100 individuals who were randomly selected from the general population of the United States. These individuals were surveyed via mail.

3. The third group of respondents (Group 3) consisted of 100 individuals who were randomly selected from the general population of the United States. These individuals were surveyed via internet.

4. The fourth group of respondents (Group 4) consisted of 100 individuals who were randomly selected from the general population of the United States. These individuals were surveyed via focus groups.

5. The fifth group of respondents (Group 5) consisted of 100 individuals who were randomly selected from the general population of the United States. These individuals were surveyed via in-depth interviews.

6. The sixth group of respondents (Group 6) consisted of 100 individuals who were randomly selected from the general population of the United States. These individuals were surveyed via a combination of the above methods.

7. The seventh group of respondents (Group 7) consisted of 100 individuals who were randomly selected from the general population of the United States. These individuals were surveyed via a combination of the above methods.

8. The eighth group of respondents (Group 8) consisted of 100 individuals who were randomly selected from the general population of the United States. These individuals were surveyed via a combination of the above methods.

9. The ninth group of respondents (Group 9) consisted of 100 individuals who were randomly selected from the general population of the United States. These individuals were surveyed via a combination of the above methods.

10. The tenth group of respondents (Group 10) consisted of 100 individuals who were randomly selected from the general population of the United States. These individuals were surveyed via a combination of the above methods.

Setup Start

Stop

[REDACTED]

Cust Item ID:[illegible]

Customer:

Reference:

Run Start

Date:

Tooling:




Date:

Date:

SPC (Y/N):

Date:

Stop

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
140		0.00							
									
HandThermo	Memo	0.00				x 7			Dh
Hand Finishing Thermoforming	1-Trim to finished dimensions as per Dwg								11/08/18
150		0.00							
									
QC	Memo	0.00				x 1			Dh
Quality Control	Complete FAI document								11/08/18
160		0.00							
									
QC	Memo	0.00				(x 9)			
Quality Control						2			

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Work Order ID 72769

Friday, August 12, 2011 2:34:38 PM



Page 4

Item ID: D3874-2

Accept



Setup Start



Revision ID:

Stop



Item Name: Floor Protector

Start Date: 8/12/2011 Start Qty: 4.00



Cust Item ID:

Required Date: 8/19/2011 Req'd Qty: 4.00



Customer:

Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

Run Start



QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Stop

Sequence ID/
Work Center IDOperation
DescriptionSet Up/
Run Hours

Tool ID

Tool #

Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

170

Identify as per dwg & Stock Location: _____

0.00



Packaging

Memo

0.00

Packaging

11/8/11 (4)

180

QC21- Final Inspection - Work Order Release

0.00



QC

Memo

0.00

Quality Control

11/8/22 (4)

11/10/11 (4)

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Picklist Print

Friday, August 12, 2011 2:34:43 PM

Page 1

Work Order ID: 72769

Parent Item: D3874-2

Parent Item Name: Floor Protector



Start Date: 8/12/2011

Required Date: 8/19/2011

Start Qty: 4.00

Required Qty: 4.00

Comments: IPP Rev. A 09.02.06 New Issue DL
Add Step 105 Dry Material 10/04/21 DL

IPP Rev B

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
---------------------------------	------------------------	---------------	-------------	---------------------	------------------	-----------------	--------------------	----------------	-------------	--------------	---------------	----------------	--------

MLEXS.118-90318-08

Purchased

No

100

sf

1,938.942

4.38

17.52



Lexan Sheet

Location

therm

Loc Qty

1938.942621

1938.94262

Loc Code

113127

17.52 sq ft

DL
11/08/17

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

DART AEROSPACE LTD	Work Order:	72769
Description: Floor Protector	Part Number:	D3874-2
Inspection Dwg: D3874 Rev: A		Page 1 of 1

FIRST ARTICLE INSPECTION CHECKLIST

☒ First Article ☐ Prototype

THERMOFORMING SECTION

Description	Accept	Reject	Method of Inspection	Comments
Inside Radii less than _____"	N/A			
Shape Definition	✓			
Texture Retention	✓			
Material imperfections such as bumps, cracks, voids, scratching	✓			

Measured by:

dh

Date:

11/08/17

TRIMMING SECTION

Drawing Dimension	Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments
0.050	Min	0.091"	✓			
0.065	Min	0.104"	✓			
0.5	Min	0.55"	✓			
21.9	REF	21.875"	✓			

Measured by:

dh

Date:

11/08/18

Audited by:

S

Date:

11/08/18

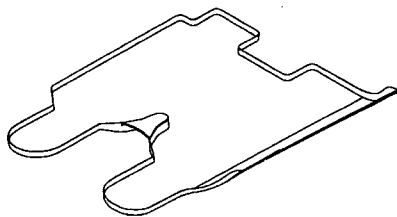
Prototype Approval:

N/A

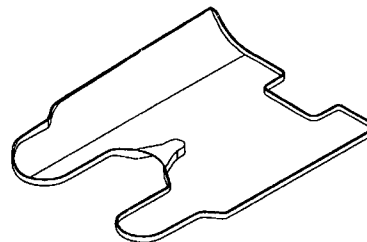
Date:

N/A

Rev	Date	Change	Revised by	Approved
A	09.09.15	New Issue	KJ	dh



D3874-1 FLOOR PROTECTOR



D3874-2 FLOOR PROTECTOR

SHOP COPY
RETURN TO
ENGINEERING
UNCONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER
NO. 72729 *11-08-12*

RELEASED
2/10/2012

A	NEW ISSUE	PH	09.01.29
REV.	DESCRIPTION	BY	DATE
DESIGN	<i>PH</i>	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN	<i>PH</i>		
CHECKED	<i>PH</i>	DRAWING NO.	REV. A
MFG. APPR.	<i>PH</i>	D3874	SHEET 1 OF 3
APPROVED	<i>PH</i>	TITLE	SCALE
DE APPR.	<i>PH</i>	FLOOR PROTECTOR	NTS
DATE	09.01.29	<small>COPYRIGHT © 2009 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.</small>	

8 7 6 5 4 3 2 1

D

C

B

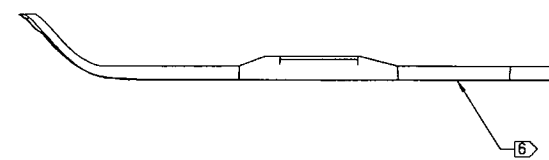
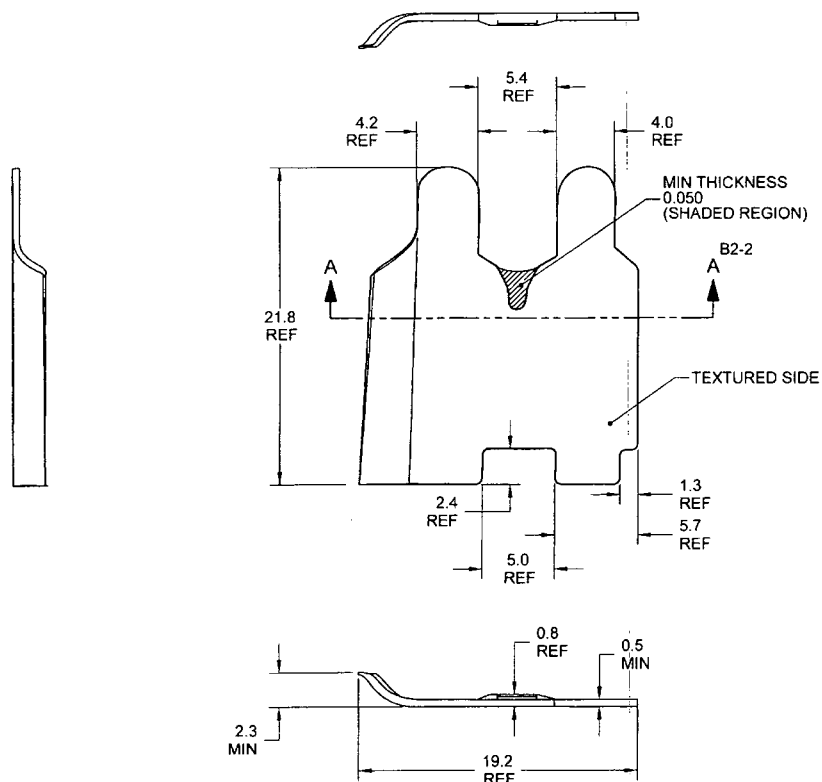
A

D

C

B

A



SECTION A-A
SCALE 2X

72769

D3874-1 FLOOR PROTECTOR

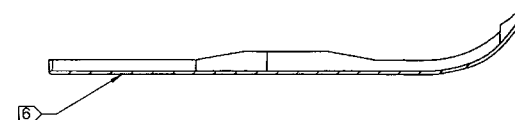
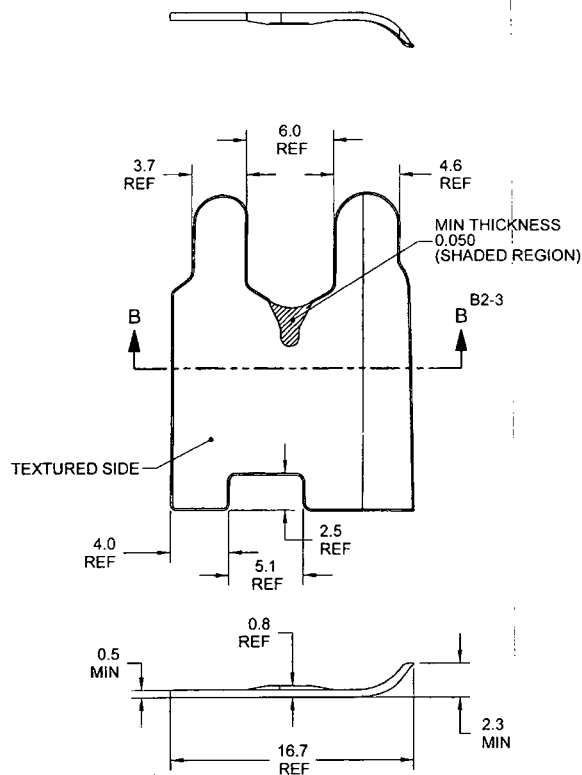
RELEASED
9/25/03

NOTES:

- 1) MATERIAL: LEXAN 90318 (PROTECT-A-GLAZE), 0.118 THICK, 112-CLEAR (MLEXS.118-90318-08)
- 2) FINISH: NONE
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: IDENTIFY WITH DART P/N "D3874-1" USING VIBRATING STYLUS
- 7) WEIGHT: 1.5 lbs
- 8) TOOLING: THERMOFORM PER MOLD DT9474 PER DART QSI 022--TRIM PER MOLD
- 9) MINIMUM THICKNESS: 0.050" ON FLANGES AND 0.065" ELSEWHERE EXCEPT AS SHOWN

DESIGN	<i>Pgt</i>	DART AEROSPACE LTD	
DRAWN	<i>Pgt</i>	HAWKESBURY, ONTARIO, CANADA	
CHECKED	<i>Pgt</i>	DRAWING NO. D3874	REV. A
MFG. APPR.	<i>Pgt</i>		SHEET 2 OF 3
APPROVED	<i>Pgt</i>	TITLE FLOOR PROTECTOR	SCALE
DE APPR.	<i>Pgt</i>		NTS
DATE	09.01.29	<small>COPYRIGHT © 2009 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSES OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.</small>	

8 7 6 5 4 3 2 1



SECTION B-B
SCALE 2X

D3874-2 FLOOR PROTECTOR

NOTES:

- 1) MATERIAL: LEXAN 90318 (PROTECT-A-GLAZE), 0.118 THICK, 112-CLEAR (MLEXS.118-90318-08)
- 2) FINISH: NONE
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: IDENTIFY WITH DART P/N "D3874-2" USING VIBRATING STYLUS
- 7) WEIGHT: 1.5 lbs
- 8) TOOLING: THERMOFORM PER MOLD DT9474 PER DART QSI 022. TRIM PER MOLD
- 9) MINIMUM THICKNESS: 0.050" ON FLANGES AND 0.055" ELSEWHERE EXCEPT AS SHOWN

DESIGN	PA	DART AEROSPACE LTD	
DRAWN	PA	HAWKESBURY, ONTARIO, CANADA	
CHECKED		DRAWING NO.	REV. A
MFG. APPR.		D3874	SHEET 3 OF 3
APPROVED		TITLE	SCALE
DE APPR.		FLOOR PROTECTOR	NTS
DATE	09.01.29	COPYRIGHT © 2009 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSES OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.	

RELEASED
2/25/09

72769